

# Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



## King rail

*Rallus elegans*

Common name • King rail

Scientific name • *Rallus elegans*

State status • Endangered

### Ecology

King rails are permanent residents of the Atlantic and Gulf coastal plains from South Carolina to Texas. During the breeding season (as early as March to as late as August), some king rails migrate north to inland marshes in the Midwest, Great Lake and mid-Atlantic states. Their habitat includes fresh and brackish wetlands. King rails prefer wetlands with abundant grasses, sedges, rushes and cattails. They prey primarily on aquatic beetles, semiaquatic beetles, fish, mollusks and crustaceans. In Missouri, breeding begins in April, with males building nests in herbaceous cover over shallow water in river floodplains. Females typically lay 10-12 eggs, and both adults incubate the clutch for approximately 21 days. Young remain with adults for at least 30 days after hatching, at which time the young may migrate or remain in the area, but generally stay together as a brood.

### Reasons for Decline

Populations of the king rail have declined extensively since the early 1960s, especially in the northern, inland portion of their range. In Missouri, king rails were historically common in marshes along large rivers, but they are now endangered and found at fewer than five locations in the state each year, primarily in wildlife refuges. Much of the decline can be directly related to conversion of wetland habitat for development. Spring and summer drawdowns to promote smartweeds may destroy king rail nests and habitat. In addition, water impoundments on rivers can affect channel flow and water regimes, altering wetland habitat and making it unsuitable for rails. Point and non-point source pollution also degrade water quality.

### Specific Recommendations

Efforts to restore and manage wetlands will benefit the king rail and the many other species that use this type of habitat.

→ Avoid altering natural swales and other topographic features that are potential habitat for king rails.

→ Dams and other impoundment structures should not be built in rivers within the range of this species.

→ No work should be allowed below the high bank of streams or below water levels in wetlands between April 1 and July 15 to prevent disrupting breeding activities.

→ Revegetate disrupted areas with native wetland species.

→ Draining or reducing known wetland habitat should be avoided within the range of the king rail.

→ Erosion and sediment controls should be implemented, maintained and monitored for the duration of the project.

### General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Wetlands and Management Recommendations for Construction Projects Affecting Missouri Rivers and Streams.

### Information Contacts

For information regarding regulations for development in wetlands, rivers and streams, contact:

Missouri Department of Conservation  
Policy Coordination Section  
P.O. Box 180  
2901 W. Truman Blvd  
Jefferson City, MO 65102-0180  
Telephone: 573/751-4115

Missouri Department of Natural Resources  
Division of Environmental Quality  
P.O. Box 176  
Jefferson City, MO 65102-0176  
Telephone: 573/526-3315

U.S. Army Corps of Engineers  
Regulatory Branch  
700 Federal Building  
Kansas City, MO 64106-2896  
Telephone: 816/983-3990

U.S. Environmental Protection Agency  
Water, Wetlands, and Pesticides Division  
901 North 5th Street  
Kansas City, KS 66101  
Telephone: 913/551-7307

U.S. Fish and Wildlife Service  
Ecological Services Field Office  
608 E. Cherry Street, Room 200  
Columbia, MO 65201  
Telephone: 573/876-1911

## Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from other state agencies, contractors and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.